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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/821,570

04/09/2004

Chanh Le

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04/21/2005

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EXAMINER

SUAREZ, FELIX E

ART UNIT

PAPER NUMBER

2857

DATE MAILED: 04/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/821,570	LE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Felix E. Suarez	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 1305.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9, 11 and 12 is/are rejected.
- 7) ☒ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 April 2004 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3/13Dec2004</u> .   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-9, 11 and 12 are rejected under 35 U.S.C. 102(b) as being unpatentable over Limon, Jr. et al. (U.S. Patent No. 6,453,435).

With respect to claim 1, Limon, Jr. et al. (hereafter Limon, Jr.) teaches a method for testing a computer system board, comprising:

loading the computer system board into a test apparatus (see col. 4, lines 35-42 and col. 12, lines 46-65);

automatically coupling a power input to the computer system board via the test apparatus (see col. 5, line 60 to col. 6 line 12);

automatically performing a plurality of computer system board tests (see col. 6, lines 49-57); and

storing results of the automatic testing (see col. 16 line 60 to col. 17 line 4).

With respect to claims 2 and 11, Limon, Jr. further teaches comprising:  
determining a type of the computer system board (see col. 6, lines 36-48  
and col. 10, lines 19-31) ; and  
automatically supplying the computer system board with a corresponding  
set of power inputs during the automatic testing operations (see col. 5, lines 29-  
41 and col. 5, line 60 to col. 6 line 12).

With respect to claim 3, Limon, Jr. further teaches comprising sequencing  
a plurality of power input signals in response to corresponding power command  
signals provided by the computer system board (see col. 13, lines 41-50).

With respect to claim 5, Limon, Jr. further teaches that the plurality of  
system board tests include testing a video subsystem of the computer system  
board (see col. 4, lines 36-43).

With respect to claim 6, Limon, Jr. further teaches comprising  
automatically inserting one or more memory devices into corresponding  
connectors on the computer system board (see col. 4, lines 52-67).

With respect to claim 7, Limon, Jr. further teaches comprising  
automatically inserting a microprocessor into a corresponding connector on the  
computer system board (see col. 4, lines 52-67).

With respect to claim 8, Limon, Jr. further teaches comprising automatically operatively coupling a peripheral card to an expansion slot on the computer system board (see col. 5, lines 23-29).

With respect to claim 9, Limon, Jr. further teaches comprising automatically connecting test electronics to at least input/output (I/O) port connector (see col. 5, lines 26-28).

With respect to claim 12, Limon, Jr. further teaches that the type of computer system board is determined by performing the operations of:

storing data in a database relating respective serial numbers of a plurality of computer system boards with corresponding computer system board types (see col. 12, lines 43-62);

scanning a serial number bar code on a given computer system board that is to be tested (see col. 12, lines 18-27); and

determining the system board type of that computer system board via a lookup of the database using the serial number that was scanned (see col. 12, lines 46-62).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Limon, Jr. et al. (U.S. Patent No. 6,453,435) in view of Neal (U.S. Patent No 4,550,406).

With respect to claim 4, Limon, Jr. et al. (hereafter Limon, Jr.) further teaches all the features of the claimed invention except that Limon, Jr. does not teach that the plurality of system board tests include testing the computer system board for short circuits.

But Neal teaches an automatic test program list generator for generating a test program list for a printed wiring board. The purpose of the test program list is to test loaded production, printed wiring boards on an in-circuit tester for shorts, opens, missing components, wrong components, and misplaced or improperly oriented components and give confidence that the board is manufactured correctly (see Neal; col. 7, lines 13-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Limon, Jr. to include short circuit testing as taught by Neal, because the short circuit testing of Neal can be performed on a printed wiring boards, or in a computer system board, as desired.

3. Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

4. This action is responsive to papers filed 12/13/2004.

5. Applicant's arguments filed 12/13/2004 have been fully considered but they are not persuasive respect to independent claims 1 and 11. The Examiner has thoroughly reviewed applicant arguments, but believes the cited references to reasonably and properly meet the claimed limitations.

The invention is a universal automated circuit board tester.

Applicant claims a method for testing a computer system board, comprising:

automatically coupling a power input to the computer system board via the test apparatus.

The Examiner rejects claims 1-9, 11 and 12, in view of the newly discovered references to Limon, Jr. et al. (U.S. Patent No. 6,453,435) and Neal (U. S. Patent No. 4,550,406).

***Conclusion***

***Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.


Lin [U.S. Patent No. 6,754,763] describes an input/output I/O, or read/write registers.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Felix Suarez, whose telephone number is (571) 272-2223. The examiner can normally be reached on weekdays from 8:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on (571) 272-2216. The fax phone numbers for the organization where this application or proceeding is assigned is 703-872-9306 for regular communications and for After Final communications.

April 7, 2005

F.S.

  
MARC S. HOFF  
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